

Comparisons of Job Characteristics

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Compare Knowledge

Compare Skills

Compare Abilities

Compare Detailed Work Activities

Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 60

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Geography	3.9	13.3	9.7	<< Extensive education and/or training may be required
Transportation	4.6	11.5	5.7	<< Extensive education and/or training may be required
Biology	3.7	9.4	11.4	> Current knowledge level is likely sufficient
History and Archeology	2.6	8.4	2.7	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Management of Personnel Resources	6.9	9.1	6.9	<< Extensive development of skills in this area may be required
Mathematics	6.2	9.1	9.2	0 Current skill level may be sufficient
Equipment Selection	3.3	5.3	4.7	< A higher skill level may be required
Programming	2.2	4.6	1.8	<< Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 88

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Far Vision	7.8	11.9	8.3	<<	Extensive improvement in abilities may be required
Depth Perception	5.3	9.2	6.7	<<	Extensive improvement in abilities may be required
Stamina	4.0	8.0	4.5	<<	Extensive improvement in abilities may be required
Spatial Orientation	2.7	7.4	3.9	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	7.0	4.8	<<	Extensive improvement in abilities may be required
Glare Sensitivity	2.6	6.9	4.5	<<	Extensive improvement in abilities may be required
Dynamic Strength	3.5	6.5	3.6	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	6.4	3.1	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Advise clients or customers	19
Analyze biological research, test, or analysis data	70
Analyze scientific research data or investigative findings	27
Collect geographic or physical data	81
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Compile numerical or statistical data	38
Conduct field research or investigative studies	52
Conduct laboratory research or experiments	57
Determine negligence or violation of laws or regulations	92
Develop or maintain databases	30
Develop tables depicting data	33
Direct and coordinate activities of workers or staff	3

Draw maps or charts	69
Enforce laws, ordinances, or regulations	66
Ensure compliance with government regulations	76
Explain complex mathematical information	30
Follow safe waste disposal procedures	50
Issue licenses or permits	84
Maintain records, reports, or files	5
Obtain technical support instructions from scientists or engineers	87
Prepare reports	8
Record test results, test procedures, or inspection data	48
Use biological testing instruments	73
Use chemical testing or analysis procedures	54
Use computers to enter, access or retrieve data	3
Use government regulations	44
Use hazardous materials information	35
Use interpersonal communication techniques	10
Use knowledge of environmental laws and regulations	76
Use knowledge of investigation techniques	16
Use laboratory equipment	60
Use mathematical or statistical methods to identify or analyze problems	30
Use pollution control techniques	62
Use quantitative research methods	35
Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 63

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)
Associated Occupation: Forest and Conservation Technicians (19-4093)

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Humidity and moisture measuring instruments	15
Hydrological instruments	31
Industry specific software	1

Information exchange software	1
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Meteorological instruments	16
Network applications software	1
Pumps	9
Sampling equipment	12
Soil measuring equipment	20

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.